

SEQUENCE LISTING

<110> Sheppard, Paul O.
Bishop, Paul D.

<120> Seleno-cysteine Containing Protein
ZnK13

<130> 00-87

<150> 60/256,676

<151> 2000-12-18

<160> 6

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 1355

<212> DNA

<213> Agkistrodon piscivorus piscivorus

<400> 1

```

ggatccaggc tgaattcggc acgaggctgg atggagacgc cgctgctttg gctgccgctg 60
ctgctgctgg ggctgctctc gcccttgccg ccgtgcagct cgaccggagc 120
cgctgcagct ggctggcccg cgggaagggtg gagagctgtg gaggatgacg cttgaaccgc 180
ctgccagagg taaaggcctt tctcaacgaa gacctgcctt tgtaccacaa catggacttg 240
aagtacctgg ctggagcgga cctgagctc atcctgctca acattcaatt tgaagaactt 300
cagagaatcc cattgagtga catgagccgg gaagagataa accagctgat gcaagaattg 360
ggattctacc gaaaagacac gccggactcc cctgttcccg atgcttttca aatggcgccct 420
gctaattcac tgccatcaga tgtggaagca atgaagaaca gacgtgcgaa agagaaaaag 480
gggggggggg gtcacagcct atagaattca acgtgctctg cttgtgaagg gtgcctgtta 540
gaaagaatgg gaagtctcag ggcattggca atatctaata aatctgcaac catatagata 600
agatctctcg tggttcacac acggctgaat tgtgtgctcc gagaaattaa catttagaga 660
agattcaaaag gctgcaaaact tttgcttaag gagaagaact tgttgccctc agaagcaaaa 720
tgtgcaaaac aaagacagcc acatatatgc aaccccgggc cagttacaga cagcccttga 780
cttacgacta caatcgagac tggaaaaaac gtgtttaagc atgtgcagtt gtcaagcaag 840
acaccacatc ggctgtgatt gtgactttcc ccgcctgctt cgccacttgc tttgtgcttg 900
tcggaagccg gttgggaag gttgcaaatg gcgactgtgt gacttgcaag acaccgactg 960
tggtgaaggc caagccaaca accaacaact acaacagccc ttgtcaaatg tgcgtgaagt 1020
aagggtctgc tgaactcgg acgaaattga ctggaagaag cctcaaggga ttcgccttt 1080
catccccaaga ccggatcctt gcacaaggca ccacacaagg gtccaactcc gtagaccaga 1140
ctttccctcc aggtgtgctt cacctgtgca ggacaggtat aagccctctc gacaaaactt 1200
ttgctgctga ggggtgatag acacgtctct tcgggctgaa agcgcagcct gctggggagc 1260
aggtgcacca accccaactg gtttaggata gtaacaataa agtltgcttc gtcaaccacc 1320
aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaa

```

<210> 2

<211> 110

<212> PRT

<213> Agkistrodon piscivorus piscivorus

<220>

<221> VARIANT

<222> (46)...(46)

<223> Xaa is selenocysteine.

<400> 2

```

Met Glu Thr Pro Leu Leu Trp Leu Pro Leu Leu Leu Gly Leu Leu
1           5           10          15
Ser Ala Leu Ala Pro Leu Arg Ala Val Gln Leu Asp Arg Ser Arg Leu
20          25          30

```

Gln Trp Leu Ala Arg Gly Lys Val Glu Ser Cys Gly Gly Xaa Arg Leu
 35 40 45
 Asn Arg Leu Pro Glu Val Lys Ala Phe Leu Asn Glu Asp Leu Pro Leu
 50 55 60
 Tyr His Asn Met Asp Leu Lys Tyr Leu Ala Gly Ala Asp Pro Glu Leu
 65 70 75 80
 Ile Leu Leu Asn Ile Gln Phe Glu Glu Leu Gln Arg Ile Pro Leu Ser
 85 90 95
 Asp Met Ser Arg Glu Glu Ile Asn Gln Leu Met Gln Glu Leu
 100 105 110

<210> 3
 <211> 471
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> This degenerate nucleotide sequence encodes the
 amino acid sequence of SEQ ID NO:2.

<221> variation
 <222> (1)...(471)
 <223> N is A, G, C, or T.

<400> 3
 atggaracnc cnytnytntg gytnccnytn ytnytnytn gnytnytnws ngenytnngen 60
 ccnytnmgng cngtncaryt ngaymgnwsn mgnytncart ggytnngcmg nggnaargtn 120
 garwsntgyg gnggnnnnmg nytnaaymgn ytnccngarg tnaargcntt yytnaaygar 180
 gayytnccny tntaycayaa yatggayytn aartayytn gnggngcnga yccngarytn 240
 athytnytna ayathcartt ygargarytn carmgathc cnytnwsnga yatgwsnmgn 300
 gargaratha aycarytnat gcargarytn ggnttytaym gnaargayac nccngaywsn 360
 ccngtncng aygcnttyca ratggcncn gnaaywsny tncnwsnga ygtngargcn 420
 atgaaraaym gnmngcnaa rgaraaraar gngcnggng gncngayyt n 471

<210> 4
 <211> 48
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Selenocysteine insertion motif.

<221> variation
 <222> (5)...(14)
 <223> N is A, T, G, or C.

<221> variation
 <222> (15)...(16)
 <223> N is A, T, G, C, or absent.

<221> variation
 <222> (19)...(34)
 <223> N is A, T, G, or C.

<221> variation
 <222> (35)...(44)
 <223> N is A, T, G, C, or absent.

<221> variation
 <222> (45)...(45)
 <223> N is A, T, G, or C.

<221> variation
 <222> (48)...(48)
 <223> N is A, T, G, or C.

<400> 4
 augannnnnnn nnnnnnaann nnnnnnnnnn nnnnnnnnnn nnnnngan 48

<210> 5
 <211> 40
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Selenocysteine insertion element.

<400> 5
 atgaagccct ctgcagaaag cttttgctgc tgagggtgga 40

<210> 6
 <211> 44
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Selenocysteine insertion element.

<400> 6
 atgaagccct ctgcagaaag cttttgctgc tgagggtgga taga 44